
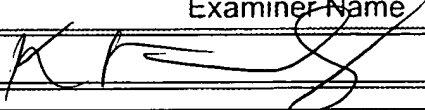
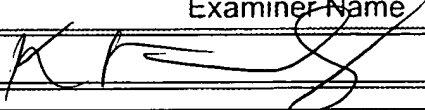
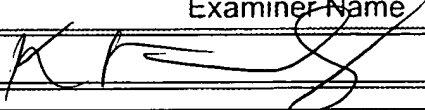


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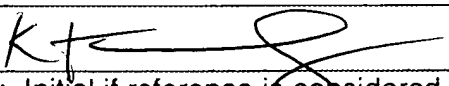
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Title of Invention	HIGH THROUGHPUT SYSTEMS AND METHODS FOR PARALLEL SAMPLE ANALYSIS																				
<p>Application Number: 10/736154 </p> <p>Confirmation Number: 3667</p> <p>First Named Applicant: Steven HOBBS</p> <p>Attorney Docket Number: 133-US</p> <p>Art Unit: 2881</p> <p>Search string: (6464866).pn.</p> <p>US Patent Documents</p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td>KF</td><td>1</td><td>6464866</td><td>2002-10-15</td><td>Moon et al.</td><td>B2</td><td>210</td><td>198.2</td></tr></tbody></table> <p>Signature</p> <table border="1"><thead><tr><th>Examiner Name</th><th>Date</th></tr></thead><tbody><tr><td></td><td>4-1-05</td></tr></tbody></table>		init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass	KF	1	6464866	2002-10-15	Moon et al.	B2	210	198.2	Examiner Name	Date		4-1-05
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KF	1	6464866	2002-10-15	Moon et al.	B2	210	198.2														
Examiner Name	Date																				
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	APPLICANT: HOBBS, Steven E. et al.	
	FILING DATE: December 13, 2003	GROUP: [not yet assigned]

U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE	
KP	A1 2003/0200794 A1	10/30/2003	Paul	73	54.05	4/28/2003	
	A2 6,614,030 B2	9/2/2003	Maher et al.	250	458.1	5/15/2002	
	A3 6,613,581 B1	9/2/2003	Wada et al.	436	518	8/17/2000	
	A4 2003/0162304 A1	8/28/2003	Dority et al.	436	180	2/25/2002	
	A5 6,581,441 B1	6/24/2003	Paul	73	61.52	6/24/2003	
	A6 2003/0089846 A1	5/15/2003	Cooks et al.	250	281	5/25/2000	
	A7 2003/0089663 A1	5/15/2003	Petro et al.	210	656	8/28/2002	
	A8 6,547,941 B2	4/15/2003	Kopf-Sill et al.	204	452	7/31/2001	
	A9 6,532,978 B1	3/18/2003	Müller-Kuhrt et al.	137	1	11/22/1999	
	A10 2002/0199094 A1	12/26/2002	Strand et al.	713	150	12/27/2001	
	A11 2002/0189947 A1	12/19/2002	Paul et al.	204	461	8/29/2001	
	A12 2002/0158022 A1	10/31/2002	Huang et al.	210	656	4/5/2002	
	A13 6,437,345 B1	8/20/2002	Bruno-Raimondi et al.	250	458.1	11/14/2000	
	A14 6,410,915 B1	6/25/2002	Bateman et al.	250	288	6/17/1999	
	A15 2002/0068366 A1	6/6/2002	LaDine et al.	436	518	4/13/2001	
	A16 2002/0041827 A1	4/11/2002	Yager et al.	422	57	5/22/2001	
	A17 6,369,893 B1	4/9/2002	Christel et al.	356	417	5/19/1999	
	A18 2002/0036018 A1	3/28/2002	McNeely et al.	137	806	9/27/2001	
	A19 2002/0027197 A1	3/7/2002	Duholke et al.	250	288	6/5/2001	
KF	A20 6,318,157 B1	11/20/2001	Corso et al.	73	61.52	4/20/2000	
KF	A21 6,296,771 B1	10/2/2001	Miroslav	210	656	10/1/1999	
KF	A22 6,264,892 B1	7/24/2001	Kaltenbach et al.	422	68.1	1/11/2000	
KF	A23 6,191,418 B1	2/20/2001	Hindsgaul et al.	250	288	4/29/1998	

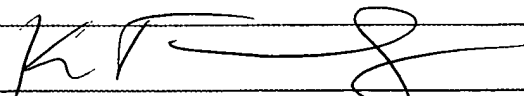
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EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
K	A24	6,066,848	5/23/2000	Kassel et al.	250	288	11/3/1998
	A25	6,012,488	1/11/2000	Nichols	137	625.11	9/17/1998
	A26	5,917,184	6/29/1999	Carson et al.	250	288	2/7/1997
	A27	5,872,010	2/16/1999	Karger et al.	436	173	7/3/1996
	A28	5,071,547	12/10/1991	Cazer et al.	210	198.2	3/23/1990
	A29	4,840,074	6/30/1989	Jessop	73	864.81	3/31/1988
K	A30	4,507,555	3/26/1985	Chang	250	281	3/4/1983

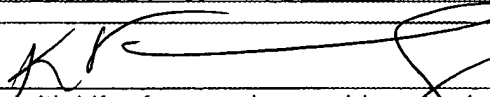
FOREIGN PATENT DOCUMENTS							
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K	B1	WO 02/30486 A2	4/18/2002	WIPO	Manager et al.		
	B2	EP 1 106 244 A2	6/13/2001	EPC	Bergh et al.		
	B3	WO 01/38865 A1	5/31/2001	WIPO	Harrison et al.		
	B4	WO 00/72970 A1	12/7/2000	WIPO	Petersen et al.		
	B5	WO 98/35376	8/13/1998	WIPO	Tai et al.		
K	B6	WO 98/09315	3/5/1998	WIPO	Hewlett-Packard Company		

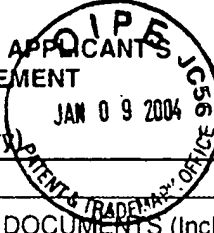
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K	C1	"Multi-Parallel-HPLC," Web document published at: http://www.sepiatec.com/download/phplc.pdf , SEPIAtec GmbH, Louis-Blériot-Strasse 5 D-12487 Berlin Germany.
	C2	Figeys, Daniel et al., <i>Lab-on-a-Chip: A Revolution in Biological and Medical Sciences</i> , "Analytical Chemistry," May, 1, 2000
	C3	Wachs, Timothy et al., <i>Electrospray Device for Coupling Microscale Separations and Other Miniaturized Devices with Electrospray Mass Spectrometry</i> , "Analytical Chemistry," Vol. 73, No. 3, February 1, 2001, pp. 632-638
	C4	Morrison, Denise et al., <i>An Evaluation of a Four-Channel Multiplexed Electrospray Tandem Mass Spectrometry for Higher Throughput Quantitative Analysis</i> , "Analytical Chemistry," Vol. 74, No. 8, April 15, 2002, pp. 1896-1902
K	C5	Figeys, Daniel et al., <i>An Integrated Microfluidics-Tandem Mass Spectrometry System for Automated Protein Analysis</i> , "Analytical Chemistry," Vol. 70, No. 18, September 15, 1998, pp. 3728-3724

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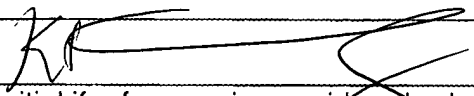
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NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)		
C6	Xue, Qifeng et al., <i>Multichannel Microchip Electrospray Mass Spectrometry</i> , "Analytical Chemistry," Vol. 69, No. 3, February 1, 1997, pp. 426-430	
C7	Wagner, Knut et al., <i>An Automated On-Line Multidimensional HPLC System for Protein and Peptide Mapping with Integrated Sample Preparation</i> , "Analytical Chemistry," Vol. 74, No. 4, February 15, 2002, pp. 809-820	
C8	Xu, Rongda et al., <i>Application of Parallel Liquid Chromatography/Mass Spectrometry for High Throughput Microsomal Stability Screening of Compound Libraries</i> , "Journal of the American Society for Mass Spectrometry," 2002, 13, 155-165	
C9	Van Pelt, Colleen K. et al., <i>A Four-Column Parallel Chromatography System for Isocratic or Gradient LC/MS Analyses</i> , "Analytical Chemistry," Vol. 73, No. 3, February 1, 2001, pp. 582-588	
C10	Janiszewski, John S. et al., <i>A High-Capacity LC/MS System for the Bioanalysis of Samples Generated from Plate-Based Metabolic Screening</i> , "Analytical Chemistry," Vol. 73, No. 7, April 1, 2001, pp. 1495-1501	
C11	Zhang, Bailin et al., <i>High-Throughput Microfabricated CE/ESI-MS: Automated Sampling from a Microwell Plate</i> , "Analytical Chemistry," Vol. 73, No. 11, June 1, 2001, pp. 2675-2681	
C12	Tang, Keqi et al., <i>Generation of Multiple Electrosprays Using Microfabricated Emitter Arrays for Improved Mass Spectrometric Sensitivity</i> , "Analytical Chemistry," Vol. 73, No. 8, April 15, 2001, pp. 1658-1663	
C13	Liu, Hanghui et al., <i>Development of Multichannel Devices with an Array of Electrospray Tips for High-Throughput Mass Spectrometry</i> , "Analytical Chemistry," Vol. 72, No. 14, July 15, 2000, pp. 3303-3310	
C14	Yang, Liyu et al., <i>Evaluation of a Four-Channel Multiplexed Electrospray Triple Quadrupole Mass Spectrometer for the Simultaneous Validation of LC/MS/MS Methods in Four Different Preclinical Matrixes</i> , "Analytical Chemistry," Vol. 73, No. 8, April 15, 2001, pp. 1740-1747	
C15	"LCT with MUX-technology," Internet document from www.micromass.co.uk/systems/sysorg22.asp , Printed 7/19/2002, date of origin unknown	
C16	Xu, Rongda et al., <i>High-Throughput Mass-Directed Parallel Purification Incorporating a Multiplexed Single Quadrupole Mass Spectrometer</i> , "Analytical Chemistry," Vol. 74, No. 13, July 1, 2002, pp. 3055-3062	
C17	Fang, Liling et al., <i>High-throughput liquid chromatography ultraviolet/mass spectrometric analysis of combinatorial libraries using an eight-channel multiplexed electrospray time-of-flight mass spectrometer</i> , "Rapid Communications in Mass Spectrometry," 2002, 16, 1440-1447	
C18	Rohrbacher, Andreas et al., <i>Multiple-ion-beam time-of-flight mass spectrometer</i> , Review of Scientific Instruments," Volume 72, Number 8, August 2001;	
C19	Abian, J., <i>The Coupling of Gas and Liquid Chromatography with Mass Spectrometry</i> , "Journal of Mass Spectrometry," 34, 157-168, (1999)	
C20	"HPLC: Micro LC/MS Analysis of Biological Samples," Web publication; http://www.sge.com , 4/1/1998	
C21	Kameoka, Jun et al., <i>A Polymeric Microfluidic Chip for CE/MS Determination of Small Molecules</i> , "Analytical Chemistry," Vol. 73, No. 9, May 1, 2001, pp. 1935-1941	
C22	Yin, Hongfeng et al., "A polymeric microfluidic device with integrated mass-spectrometer interface," Web publication, 2002	
C23	Kim, Young Chan et al., "Rapid Sample Cleanup Microchip for Protein Analysis by Electrospray Ionization Mass Spectrometry," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 123-124	
C24	Lazar, Iulia M. et al., "Microchip Integrated Analysis System for Electrospray Mass Spectrometric Analysis of Complex Peptide Mixtures," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg, (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 219-221	
C25	Killeen, Kevin et al., "Chip-MS: A Polymeric Microfluidic Device with Integrated Mass-Spectrometer Interface," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 331-332	

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KF	C26	Svedberg, Malin et al., "Electrospray from a Plastic Chip," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001, Kluwer Academic Publishers, the Netherlands, pp. 335-336
	C27	Jiang, Yun et al., <i>Integrated Plastic Microfluidic Devices with ESI-MS for Drug Screening and Residue Analysis</i> , "Analytical Chemistry," Vol. 73, No. 9, May 1, 2001, pp. 2048-2053
	C28	Zweigenbaum, Jerry et al., <i>High-Throughput Bioanalytical LC/MS/MS Determination of Benzodiazepines in Human Urine: 1000 Samples per 12 Hours</i> , "Analytical Chemistry," Vol. 71, No. 13, July 1, 1999, pp. 2294-2300
	C29	Liu H. et al., "A 96-Channel Microdevice for High Throughput Electrospray Ionization Mass Spectrometry (ESI/MS)," Web document published at: http://www.geocities.com/ResearchTriangle/Lab/4688/ht-ms.html , 6/9/1998
	C30	God, Ralf et al., "Using multiparallel HPLC for purification in drug discovery from nature," Web document published at: http://www.iscpubs.com/articles/aln/n0112god.pdf , 12/1/2001
	C31	Li, Jianjun et al., <i>Integrated system for high-throughput protein identification using a microfabricated device coupled to capillary electrophoresis/nanoelectrospray mass spectrometry</i> , "Proteomics," 2001, 1, 975-986
	C32	Zhang, B. et al., <i>Microfabricated Devices for Capillary Electrophoresis-Electrospray Mass Spectrometry</i> , "Analytical Chemistry," Vol. 71, No. 15, August 1, 1999, pp. 3258-3264
	C33	Moore, Roger E. et al., <i>A Microscale Electrospray Interface Incorporating a Monolithic, Poly(styrene-divinylbenzene) Support for On-Line Liquid Chromatography/Tandem Mass Spectrometry Analysis of Peptides and Proteins</i> , "Analytical Chemistry," Vol. 70, No. 23, December 1, 1998, pp. 4879-4884
	C34	Little, David et al., "A Parallel LC-MS/MS System for High Throughput Quantification in Drug Discovery," Micromass Application Note 248, May 2000
	C35	Dunn, John A. et al., "A Parallel LC/MS/MS System for the High Throughput Quantification of Clinical Trial Samples. A Validation Study," Waters/Micromass Application Note, October 2002
	C36	Tan, Aimin et al., <i>Chip-Based Solid-Phase Extraction Pretreatment for Direct Electrospray Mass Spectrometry Analysis Using an Array of Monolithic Columns in a Polymeric Substrate</i> , "Analytical Chemistry," Vol. 75, No. 20, October 15, 2003, pp. 5504-5511
	C37	Lin, Yuehe et al., "Microfluidic Devices on Polymer Substrates for Bioanalytical Applications," Web document published at: www.pnl.gov/microcats/aboutus/publications/microchemical/Microtechpresentation.pdf , 1999
KF	C38	Manz, Andreas et al., <i>Miniaturization of Separation Techniques Using Planar Chip Technology</i> , "Journal of High Resolution Chromatography," Vol. 16, July 1993

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